

NOTES, ABSTRACTS AND REVIEWS.

INTERNATIONAL WEATHER TELEGRAPHY.

[Excerpts from *Nature*, London, Dec. 9, 1920, p. 484, and comments by U. S. Weather Bureau.]

The International Commission for Weather Telegraphy, appointed at the general Meteorological Conference at Paris in October, 1919, met at the Air Ministry during the week November 22-27. Maj. Gen. Sir F. H. Sykes, controller general of civil aviation [who welcomed the delegates], emphasized the special need for international agreement in meteorology because nations were more interdependent in respect of that science than of any other.

During the meeting the commission came to an agreement upon the codes for the transmission of surface observations and upper-air observations in land messages and for a new figure code for the transmission of reports from ships at sea.

It also agreed upon a time-table for the issue by radiotelegraphy of data messages for the preparation of synoptic charts and upon the distribution of stations in Europe for the issue from the Eiffel Tower of collective data messages for the whole European réseau.

The principal changes in the new code are:

(a) The number of figures for reporting barometric tendency is reduced from two to one, and the unit for barometric tendency is standardized as the half-millibar per three hours, or, for countries using the millimeter scale, the half-millimeter per three hours.

(b) A two-figure code for reporting the weather takes the place of the old single-figure code, and permits the amount and character of the precipitation to be reported.

(c) Provision is made for reporting visibility up to 30 kilometers, according to a graduated scale.

(d) One figure is allotted to reports of humidity which will be given to the nearest 10 per cent.

* * * * *

(e) One figure group is allotted to reports of the form, amount, and height above ground of the clouds. It may be noted that the height of the clouds above ground and the visibility are at present the two elements of the greatest importance to aviation.

(f) Provision is made for reporting twice a day the hour of commencement of rainfall.

* * * * *

(g) A special group of five figures is allotted to a selection of stations in each country for the purpose of reporting as exactly as possible the direction and relative speed obtained by nephoscopic observations of clouds.

(h) Three special groups are allotted to selected stations in each country for reporting the direction and speed of the upper wind as determined by observations with pilot balloons, shell bursts, kite balloons, and other methods.

(i) Ten groups as a maximum have been allotted to one, two, or three stations in each country where facilities are available for obtaining the temperature and humidity of the upper air to great altitudes by means of aeroplanes or kite balloons.

In connection with the observations of the upper air, the commission was interested to learn from Prof. de Quervain of the proposal to establish a station in Switzerland at an altitude of 3,500 meters, from which barometric observations would be of the highest value in the construction of charts for that level.

The code adopted for the reports by wireless telegraphy from ships at sea provides for the same information as that which is given in the messages on land with the omission of barometric tendency, relative humidity, and the height of clouds.

* * * * *

The commission learned with much interest that meteorological observations were being made this winter on behalf of the Norwegian institute in the island of Jan Mayen, which is situated about 600 miles northeast of Iceland; and that there was a prospect in the not distant future of obtaining meteorological observations from Greenland by radiotelegraphy.

ATTITUDE OF U. S. WEATHER BUREAU.¹

While the unifying of the European code is highly desirable, the matter is not one in which the U. S. Weather Bureau is especially interested. A uniform code is now in use for the international exchange of observations on the North American Continent, i. e., the Weather Bureau code is used in the exchanges between this country, Canada, and Mexico. This code has certain advantages that make it desirable to retain it for American use. It employs words instead of figures. As each word generally represents two or more numbers, and as, in this country, the telegraph companies count every figure in a group as a separate word, the word code entails much less expense for telegraph tolls than would a numerical code. Another advantage of a word code, which is commended to the attention of the European meteorological services, is that minor errors in the transmission of words, such as the transposition of letters, are usually of no consequence, as anybody familiar with the code readily detects the error and can supply the correct word, whereas errors in the transmission of figures can not generally be detected or corrected.

* * * With respect to the interchange of observations between Europe and America, an extremely simple code suffices for this purpose, since only a few meteorological elements need to be reported. The Weather Bureau could readily use for such interchange the appropriate part of any European code that may be eventually adopted.

Marine observers on trans-Atlantic steamers can readily use two codes; one for transmission to America when they are in the western part of the ocean, and the other for transmission to Europe, when they are in the eastern part.—H. L.

THE ST. LOUIS OBSERVATORY, JERSEY.

[Reprinted from the *Meteorological Magazine*, London, February, 1921, p. 20.]

The retirement of the Rev. M. Dechevrens, S. J., of St. Louis Observatory, Jersey, and the cessation of meteorological work there, is announced. M. Dechevrens, who had been in charge of the observatory maintained by the Society of Jesus at Zi-ka-wei for many years, organized the St. Louis Observatory for the society in 1894. The equipment included many instruments of his own devising.

¹ Partly abstracted from C. F. Marvin's letter, published in the Report of the Proceedings of the Third Meeting of the Commission for Weather Telegraphy, Met. Off. Circ. 242, London, 1921, appendix xi, pp. 90-91.